EXHIBIT A

UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

JOSE ALBINO LUCERO, on Behalf of Himself and all Others Similarly Situated,

Plaintiff,

v.

SOLARCITY CORP.

Defendant.

Case No. 3:15-cv-05107-RS

DECLARATION OF RANDALL A. SNYDER

Hon. Richard G. Seeborg

REDACTED VERSION OF DOCUMENT SOUGHT TO BE SEALED

DECLARATION OF RANDALL A. SNYDER

- I, Randall A. Snyder, hereby declare as follows:
- 1. My name is Randall A. Snyder. I am an adult over the age of 18 and a resident of the state of Nevada. I have personal knowledge of each of the matters stated herein, and if called to testify, I could and would testify competently about them.
- 2. I am an independent telecommunications technology consultant and I reside at 8113 Bay Pines Avenue, Las Vegas, Nevada, 89128. I have been retained by Bursor & Fisher, P.A. in the matter *Lucero v SolarCity Corp.* No. 3:15-cv-05107-RS (N.D. Cal.) to provide my opinions relating to technology described within the Telephone Consumer Protection Act, 47 U.S.C. § 227, *et seq.* ("TCPA") and the outbound calls made by or on behalf of SolarCity Corp. ("SolarCity" or Defendant") to individuals' telephone numbers. In particular, I have been asked to determine whether the Defendant operated equipment which has the capacity to store or produce telephone numbers to be called, using a random or sequential number generator, or from a list or database of numbers, and to dial such numbers.
- 3. My opinions in this declaration are based on my education, knowledge, experience, expertise, training and my review of the following documents in this case: Second Amended Class Action Complaint; Order Denying Motion to Dismiss; Deposition Transcript of Jonathan Raymond; Deposition Transcript of Ryan Van Tricht; Deposition Transcript of Sean Peterson;

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Deposition Transcript of Alexander Sebenius;

the Telephone Consumer Protection Act, 47 U.S.C. § 227, et seq. ("TCPA") and regulations promulgated thereunder; the Federal Communications Commission's ("FCC") Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated October 16, 1992; the FCC's Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated July 3, 2003; the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 Request of ACA International for Clarification and Declaratory Ruling dated January 4, 2008; the Appeal from the United States District Court for the Northern District of California, No. 07-16356, D.C. No. CV-06-02893-CW Opinion, filed June 19, 2009; the FCC's Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated February 15, 2012; the FCC's Notice of Proposed Rulemaking in the Matter of the Middle Class Tax Relief and Job Creation Act of 2012, Establishment of a Public Safety Answering Point Do-Not-Call Registry dated May 22, 2012; the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, SoundBite Communications, Inc. Petition for Expedited Declaratory Ruling dated November 29, 2012; and the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated July 10, 2015.

4. I have over 30 years of experience in telecommunications network architecture, system architecture, engineering, design and technology. I am an expert in the fields of both wireline and wireless telecommunications networking technology. I have been retained by both plaintiffs and defendants as a testifying or consulting expert in over 130 cases regarding cellular

telecommunications technology, including 96 TCPA cases.

- 5. I have taught many classes and seminars on both wireline and wireless telecommunication network technologies and have been a panelist and speaker at numerous conferences at the Institute of Electrical and Electronics Engineers ("IEEE"), the Personal Communication Society ("PCS"), and the Cellular Telecommunications and Internet Association ("CTIA"). I spent seven years developing standards within the American National Standards Institute's ("ANSI") subsidiary organization, the Telecommunications Industry Association ("TIA"), providing technical contributions and authoring and editing telecommunications proposed standards. Most notably, I authored and oversaw the standardization of Interim Standard 93, providing interconnection technology between wireline and wireless networks, which is a fully accredited national standard of the American National Standards Institute ("ANSI").
- 6. I am the co-author of the McGraw-Hill books "Mobile Telecommunications Networking with IS-41," and "Wireless Telecommunications Networking with ANSI-41, 2nd edition" published in 1997 and 2001, respectively. I have 29 patents on telecommunications networking technology and currently have five additional published patents pending. I have also authored several articles on telecommunications technology and have been frequently quoted in industry trade publications. I have consulted for the CTIA and many wireline and wireless telecommunications companies, including IBM, Bell Laboratories, McCaw Cellular, AirTouch, AirTouch International, AT&T Wireless, AT&T Mobility, Lucent, Nokia, Ericsson, Motorola, Samsung, Siemens, Nextwave, MCI, Daewoo, Globalstar, T-Mobile, Sprint, U.S. Cellular, Teleglobe Canada, Teledesic and other telecommunications technology vendors and service providers. I was also nominated in 2006 for a National Television Arts Emmy Award for Outstanding Achievement in Advanced Media Technology for unique wireless content distribution technology I designed while employed at Entriq, Inc.
- 7. Additional details, including authored publications within at least the past ten years, are provided in my attached *curriculum vitae* (a true and correct copy of which is attached hereto as Exhibit A) along with a list of cases where I served as a testifying or consulting expert and my

standard rate sheet. I am being compensated at the rate of \$475 per hour for my study, analysis and testimony in this case.

INTRODUCTION

- 8. It is my understanding that the TCPA defines an automatic telephone dialing system ("ATDS") as "equipment which has the capacity (i) to store or produce telephone numbers to be called, using a random or sequential number generator; and (ii) to dial such numbers." Additionally, it is my understanding that the Federal Communications Commission ("FCC") has issued regulations that also define an ATDS as including the capacity to dial telephone numbers from a provided list or database of telephone numbers without human intervention.
- 9. Based on my review of the relevant documents and the facts described above, it is my opinion that the Defendant utilized equipment which has the capacity to store or produce telephone numbers to be called, using a random or sequential number generator, or from a list or database of numbers, and to dial such numbers without human intervention. I base this opinion on my knowledge, education, experience, expertise, training and on the evidence I have reviewed. Furthermore, it is my opinion that telephone numbers can be determined to be either cellular or landline telephone numbers and the ability to do so is a commonly-practiced and straightforward administrative process. Moreover, it is my opinion that telephone numbers can be determined to be included on the federal and state "Do Not Call" lists and the ability to do so is a commonly-practiced and straightforward administrative process.
- 10. Additionally, and based on my knowledge, education, experience, expertise and training, it is my opinion that current contact information about individuals can be definitively and clearly ascertained based solely on the information contained within the lead account records stored by SolarCity. Furthermore, this activity is a straightforward administrative process.

TELEPHONE NUMBER DIALING

11. To make landline telephone calls using a traditional rotary dial telephone, a caller first lifts the receiver of the telephone handset, causing an off-hook signal to be sent directly to a "switching system" as the access point within the aptly named public switched telephone network ("PSTN"). The switching system residing within the PSTN responds to the telephone

handset with an audible dial tone signal informing the caller that it is now ready to receive dialed telephone number digits. The caller then places a finger in one of ten finger holes marked 0 through 9 around the circumference of the dial and rotates the dial in an increasingly progressive circular distance to provide an increasingly higher voltage pulse signal. Each of the ten distinct dial pulse signals, based on the distinct voltage per the distance the dial is rotated, represents each of the digits symbolized by a telephone number. When the switching system receives the first digit of the called party telephone number, it disconnects the dial tone and registers that digit. After the remaining digits (dial pulse signals) of the telephone number are sent from the handset, the switching system residing in the PSTN sets up a particular outbound telephone channel to establish a call to the party represented by the dialed digits. The PSTN represents the conglomerate of telephone carrier networks that enable calls to be made from one party within a particular carrier network to any other party in any other carrier network.

- 12. In the early 1960s, dual tone multifrequency ("DTMF") dialing—commonly known as TouchToneTM dialing—was introduced and used as the method to transmit telephone number digits into the PSTN from a telephone handset. To make landline telephone calls using a DTMF phone, a caller pushes one of ten buttons, each button representing a telephone number digit marked 0 through 9. Each of ten distinct audio tone signals are generated from the handset when the corresponding button representing a digit of a telephone number is pushed. These distinct audio tone signals communicate directly with the telephone network in a similar manner to dial pulse signals. The process for establishing a call using DTMF dialing is essentially the same as rotary pulse dialing except that each digit of the telephone number is transmitted directly to the PSTN using special audio tone frequencies rather than voltage pulses. The caller simply presses a button on the handset to transmit the corresponding unique audio tone frequency representing the telephone number digit.
- 13. Both of these dialing methods (*i.e.*, rotary dial pulse signals and push-button audio tone signals) used for making landline telephone calls are known as *post-origination* dialing. To make a call from a landline telephone, the initial off-hook signal and corresponding dial tone response establishes an open connection to the PSTN. These two methods are called post-

origination dialing because the digits of the telephone number are provided by the calling party directly, and one at a time, *after* a connection has already been originated and established between the telephone handset and the PSTN. The described post-origination dialing methods used to initiate calls from a landline telephone are the only two signaling methods used to transmit telephone number digits to the PSTN to establish calls.

- 14. Computerized telephone dialing systems used to initiate automatic calls *en masse* are based on this fundamental landline dialing protocol. In some cases, internet-based telephony systems use alternative dialing protocols; however this typically occurs only when the switching system access point within the PSTN (*i.e.*, the carrier) supports direct internet protocol access.
- 15. The term "dial" has become a common colloquial verb in our lexicon to mean initiating a telephone call by sending signals representing telephone number digits directly into the PSTN to originate the call.
- 16. Some medium-to-large businesses require more extensive telecommunications capabilities due to serving many employees making and receiving calls within the business. These enterprises may maintain their own small computerized switching system residing at the business and known as a private branch exchange ("PBX"). A PBX switch connects directly to the external PSTN just like a basic landline telephone handset does; the primary difference being that it supports multiple and aggregated landline telephone channels that connect directly to the PSTN. A PBX can support multiple simultaneous outbound calls from within the business to parties being contacted outside the business that can only be reached via the PSTN.
- 17. Among the functions that a PBX provides to callers within the business is automatic outbound dialing of telephone numbers using dial pulse signals and DTMF signals so that calls can be initiated into the PSTN. In many cases, the PBX performs the actual outbound dialing of telephone numbers that can be sent to it in various ways, such as from a software-based computer application.
- 18. For example, internet-based telephone systems may or may not connect directly to the PSTN to make and receive calls. This is because the PSTN is a "circuit-switched" network and does not always support the architecture, technology and protocols for internet-based

"packet-switched" data networks. Internet-based telephone systems are inherently incompatible with the technology used to establish and complete calls via the PSTN. Hence, a specialized PBX is used to perform the actual telephone number dialing automatically in order to establish PSTN calls when a telephone number is passed to it as a simple data message via a software application.

AUTOMATIC TELEPHONE DIALING FUNCTIONS

- 19. Automatic telephone dialing systems used by companies that perform telemarketing, information surveys and debt collection services typically fall into several fundamental types of computerized telephone number dialing: *preview* dialing, *basic* automatic dialing, *predictive* dialing, *unattended message* dialing and *manual* dialing. Note that telephone numbers to be dialed using these dialing functions are organized as "campaigns." A campaign is simply an electronic list of telephone numbers organized by some defined criteria that are to be called for a specific purpose. Each distinct campaign calls the telephone numbers in the list using the same dialing method, which is defined within the campaign setup parameters.
- 20. Preview dialing is a method for dialing individual telephone numbers by call center agents. When preview dialing is used, each individual call center agent can "preview" a computerized call record and has the ability to originate a call to the consumer. For example, the call center agent may be able to enter the individual digits of a full 10-digit telephone number. The entered digits are sent as a message into the automatic dialing system to be subsequently dialed by the system. Furthermore, the call center agent can "invoke" the automatic sending of all the individual digits of the telephone number into the system at one time without entering the individual digits. The telephone number to be called may be displayed on the computer screen and the call center agent sends the digits into the automatic dialing system by clicking the displayed number itself or, for example, by clicking a "submit" button for the displayed telephone number. This sends a message containing the entire telephone number into the automatic dialing system to be subsequently dialed by the system. In addition, sometimes preview dialing can be fully automated. This automation is sometimes known as "timed preview dialing." Timed preview dialing automatically processes the next telephone number in the list

once the agent has concluded a call. The next telephone number to be called is processed at some predefined time limit, for example 90 seconds. If the agent does not call the next number within 90 seconds, the preview dialing system automatically processes the next telephone number in the list. This mechanism is typically used to maximize the number of calls made and to ensure call center agents are moving quickly through their call record list.

- Basic automatic dialing (sometimes known as "progressive dialing," "power dialing" or "war dialing") is a computerized method for automatically dialing lists of telephone numbers commonly used in call center operations. Basic automatic dialing is a type of automatic telephone dialing whereby the equipment initiates outbound telephone calls for sales, telemarketing, collections, information surveys or other purposes. Using this very basic type of automatic dialing, the computerized system dynamically regulates the number of calls to be automatically dialed by maintaining a simple balance among the number of call center agents currently available, the number of calls currently in progress and the "dial ratio." The dial ratio is simply the ratio of telephone lines configured per call center agent involved in a particular calling campaign. Using this basic mechanism, the number of automatic outbound telephone calls to be dialed by the computer system can be dynamically regulated (i.e., increased or decreased) over time simply based on the number of calls in progress, the number of agents and the number of telephone lines available per agent. Basic automatic dialing can sometimes use an interactive voice response ("IVR") system, whereby an artificial or prerecorded voice message is used to communicate with the called party and computerized prompts may be used to enable the called party to provide responses. The artificial or prerecorded voice messages are recorded before the calling campaign is executed and are stored in audio files that are configured as part of the IVR calling campaign.
- 22. Predictive dialing is a computerized method for automatically dialing lists of telephone numbers commonly used in call center operations. Predictive dialing is a type of automatic telephone dialing as defined by the FCC to make outbound telephone calls for sales, telemarketing, collections, information surveys or other purposes. Predictive dialing provides the capability to "predict" the availability of call center agents that can respond to the outbound calls

that have been dialed by the predictive dialing system and answered by the called party. Prerecorded voice technology may also be used to announce to the called party to wait for a call center agent to respond. Called parties that answer a predictively dialed outbound call typically experience a distinctive and recognizable pause due to the time interval during which the call is redirected back and connected to an available call center agent. In addition, predictive dialing methods enable a variety of programmatic ways to treat calls that have not been answered by the called party. As examples, calls that may be answered by voicemail, calls that receive a busy signal and calls that are not answered, may all be treated and managed differently by the automatic dialing system. "Predictive" dialing necessarily requires certain algorithmic and computerized functionality to operate properly. For example, predictive dialing requires the equipment to perform call progress analysis for each call made to detect ring-back tones, busy tones and the difference of whether a person, answering machine or voicemail system has answered a call. Additionally, automatic predictive dialing requires a "pacing" algorithmic function. Pacing algorithms are the statistical models that perform as the primary function enabling the automatic dialing system to predict the availability and increase the efficiency of the call agents. These complex algorithms are based on various factors such as average call time, number of agents available, number of expected abandoned calls, average number of answering machines detected, time of day, day of week and many, many other factors.

- 23. Note that the actual *predictive* functionality of predictive dialers occurs *after* the equipment automatically dials telephone numbers from a list of numbers. Therefore, the automatic telephone dialing function of the equipment, *i.e.*, the ability to automatically dial telephone numbers from a list of numbers, occurs prior to the call being connected and *predictively* redirected back to an available call center agent. Thus, predictive dialing is identical to basic automatic dialing with the addition of the automated capability of connecting the called party back to an algorithmically predicted call center agent.
- 24. Unattended message dialing (sometimes known as a "message blast" or a "phone blast") is a computerized method for automatically dialing electronic lists of telephone numbers with the intent to only transmit a prerecorded voice message to the called parties once the call is

answered. If an answering machine or voicemail system answers the call, the prerecorded voice message can be left as a recording for the called party to listen to later. No call center agents are required and there are no inbound calls to the system. Unattended message calls are always outbound, from an automatic telephone dialing system to a stored electronic list of telephone numbers. The prerecorded voice message is recorded before the calling campaign is executed and is stored in an audio file that is automatically played when the call is answered.

- 25. Manual dialing, performed through an automatic dialing system, is a computerized method for automatically dialing electronic lists of telephone numbers. Although automatic dialing systems may use the term "manual" dialing, there is still programmatic control and automatic functionality to perform the actual dialing process. When manual dialing is used, each individual call center agent has the ability to originate a call in typically two ways. Using the first method, the call center agent can enter the individual digits of a full 10-digit telephone number for an account to be called. The entered digits are sent as a message into the automatic dialing system to be subsequently dialed by the system. Using the second method, the call center agent can "invoke" the automatic sending of all the individual digits of the telephone number into the system at one time without entering the individual digits. The telephone number to be called may be displayed on the computer screen and the call center agent sends the digits into the automatic dialing system by clicking the displayed number itself or, for example, by clicking a "submit" button for the displayed telephone number. This sends a message containing the entire telephone number into the automatic dialing system to be subsequently dialed by the system. Furthermore, since manual dialing still has automatic functionality, the types of calls and the digits that can be entered by a call center agent are entirely programmable within the dialing system.
- 26. Both basic and predictive automatic dialing require the equipment to perform *call* progress analysis for each automatically initiated call. Call progress analysis automatically detects ring-back tones, busy tones, fast-busy tones, special information tones, answering machines, voicemail systems, a person answering a call, etc. The equipment itself essentially *listens* to the initiated call that is in progress and can be programmed to act in a particular way depending on the result of the call attempt. Call progress analysis capability is a key

characteristic of automatic telephone dialing systems. The presence of this function is inherent in the process of automatic dialing and clearly implies the capability of the equipment to automatically dial telephone numbers. This is because the functional process to analyze call progress tones is established prior to the process of electronically signaling out (*i.e.*, dialing) the ten digits of a telephone number. Computerized call progress analysis is inextricably tied to the process of automatic electronic dialing.

- Additionally, unattended message dialing, predictive dialing and basic automatic dialing can use prerecorded voice technology to leave a message on an answering machine or a voicemail system if a person does not answer the call. This function, of course, is based on the ability of the equipment to perform call progress analysis, so different prerecorded messages can be left when the automatic dialing system detects a person answering versus a voicemail system answering. For example, prerecorded voice technology can be used for predictive dialing to announce to the called party to wait on the line for a call center agent to respond or to leave a prerecorded message on an answering machine.
- 28. These types of computerized dialing (*i.e.*, preview, basic, predictive, unattended message and manual dialing) require the automatic system to store telephone numbers to be called. The numbers stored electronically are automatically and directly dialed by the dialing system equipment. The list of telephone numbers to be called by the equipment is made available to the dialing system as part of setting up each call or calling campaign.

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THE TCPA AND AUTOMATIC TELEPHONE DIALING SYSTEMS

30. For ease of reference, this section simply presents the TCPA and FCC definitions

that I understand, from Plaintiff's attorneys, to be the most applicable to my analysis in this case.

- 31. The TCPA defines an ATDS as "equipment which has the capacity— (i) to store or produce telephone numbers to be called, using a random or sequential number generator; and (ii) to dial such numbers." *See* 47 U.S.C. § 227(a)(1)).
- 32. In the FCC's Report and Order of July 3, 2003, 18 FCC Rcd. 14014 (2003), the Commission stated the following:

"The statutory definition contemplates autodialing equipment that either stores or produces numbers. It also provides that, in order to be considered an 'automatic telephone dialing system,' the equipment need only have the 'capacity to store or produce telephone numbers (emphasis added)...' It is clear from the statutory language and the legislative history that Congress anticipated that the FCC, under its TCPA rulemaking authority, might need to consider changes in technologies. In the past, telemarketers may have used dialing equipment to create and dial 10-digit telephone numbers arbitrarily. As one commenter points out, the evolution of the teleservices industry has progressed to the point where using lists of numbers is far more cost effective. The basic function of such equipment, however, has not changed—the capacity to dial numbers without human intervention. We fully expect automated dialing technology to continue to develop." (¶ 132.)

"[T]o exclude from these restrictions equipment that use predictive dialing software from the definition of 'automated telephone dialing equipment' simply because it relies on a given set of numbers would lead to an unintended result. Calls to emergency numbers, health care facilities, and wireless numbers would be permissible when the dialing equipment is paired with predictive dialing software and a database of numbers, but prohibited when the equipment operates independently of such lists and software packages. We believe the purpose of the requirement that equipment have the "capacity to store or produce telephone numbers to be called" is to ensure that the prohibition on autodialed calls not be circumvented. Therefore, the Commission finds that a predictive dialer falls within the meaning and statutory definition of 'automatic telephone dialing equipment' and the intent of Congress." (¶ 133.)

33. The FCC's Report and Order of January 4, 2008, 23 FCC Rcd. 559 (2008), stated the following:

"The commission noted that the evolution of the teleservices industry had progressed to the point where dialing lists of numbers was far

more cost effective, but that the basic function of such dialing equipment, had not changed—the capacity to dial numbers without human intervention. The Commission noted that it expected such automated dialing technology to continue to develop and that Congress had clearly anticipated that the FCC might need to consider changes in technology." (¶ 13.)

"...calls to emergency numbers, health care facilities, and wireless numbers are permissible when the dialing equipment is paired with predictive dialing software and a database of numbers, but prohibited when the equipment operates independently of such lists, would be inconsistent with the avowed purpose of the TCPA and the intent of Congress in protecting consumers from such calls." (¶ 14.)

34. In the FCC's Notice of Proposed Rulemaking of May 22, 2012, the Commission stated the following:

"Under the TCPA, the term "automatic telephone dialing system" is defined as 'equipment which has the capacity—(A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers.' Id. at § 227(a)(1). The Commission has emphasized that this definition covers any equipment that has the specified capacity to generate numbers and dial them without human intervention whether or not the numbers called are randomly or sequentially generated or come from calling lists." (p.4, footnote 12.)

35. In the most recent FCC Declaratory Ruling and Order of July 10, 2015, 30 FCC Rcd. 7961 (2015), the Commission stated the following:

"We reaffirm our previous statements that dialing equipment generally has the capacity to store or produce, and dial random or sequential numbers (and thus meets the TCPA's definition of 'autodialer') even if it is not presently used for that purpose, including when the caller is calling a set list of consumers. We also reiterate that predictive dialers, as previously described by the Commission, satisfy the TCPA's definition of 'autodialer' for the same reason. We also find that callers cannot avoid obtaining consent by dividing ownership of pieces of dialing equipment that work in concert among multiple entities." (¶ 10.)

"The Commission declined to distinguish between calls to wireless telephone numbers made by dialing equipment 'paired with predictive dialing software and a database of numbers' and calls made 'when the equipment operates independently of such lists and software packages.' Recognizing the developments in calling technology, the Commission found that '[t]he basic function of such equipment,

however, has not changed—the capacity to dial numbers without human intervention.' The Commission found it troubling that predictive dialers, like dialers that utilize random or sequential numbers instead of a list of numbers, retain the capacity to dial thousands of numbers in a short period of time and that construing the autodialer definition to exclude predictive dialers could harm public safety by allowing such equipment to be used to place potentially large numbers of non-emergency calls to emergency numbers, a result the TCPA was intended to prevent. The Commission concluded that the TCPA's unqualified use of the term 'capacity. was intended to prevent circumvention of the restriction on making autodialed calls to wireless phones and emergency numbers and found that "a predictive dialer falls within the meaning and statutory definition of 'automatic telephone dialing equipment' and the intent of Congress." (¶ 14.)



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DETERMINING CELLULAR TELEPHONE NUMBERS

- 44. Nearly 50% of all households in the U.S. today exclusively use cell phones. Cellular telephone numbers are often used as home, residential, business or other numbers and are subsequently designated as such on forms and other records. Due to the inherent unreliability of these forms and records as the guiding information for making automated outbound telephone calls, most telemarketers use a highly reliable and inexpensive technology solution that has been available to them for well over a decade.
- 45. In November, 2003, the FCC mandated the implementation of a service known as "number portability" to be offered by both landline and cellular common carriers to all landline and cellular subscribers. Specifically, the service is characterized by two features: Local Number Portability ("LNP") and Wireless Local Number Portability ("WLNP"). LNP enables cellular subscribers to "port," or transfer, their cellular telephone numbers from a cellular carrier to a landline carrier within a defined geographic local area to essentially become home landline telephone numbers and vice versa. WLNP enables cellular subscribers to "port," or transfer, their cellular telephone numbers from one cellular carrier to another, allowing them to essentially own their telephone number regardless of which cellular carrier they wish to subscribe to.
- 46. Because of number portability, there is no distinguishing characteristic within the telephone number format and the value of the digits themselves to determine which carrier services a particular telephone number and whether the number is even a landline or cellular number. The standard numbering plan in the United States for both landline and cellular telephone numbers is the ten-digit number format: "NPA-NXX-XXXX." "NPA" refers to the Numbering Plan Area, more commonly known as the three-digit "area code." The NPA is also of the format "NXX." The entire format of the number, "NXX-NXX-XXXX" refers to a numbering plan where the digit "N" can be any number from 2 through 9 and the digit "X" can be any

number from 0 through 9.

- 47. If a subscriber wishes to port his or her landline telephone number to a cellular telephone number, or vice versa, or their telephone number to another competing landline or cellular carrier, the carrier is required to do so within a few hours or less. To do this, all of the landline and cellular carriers are connected to a nationwide real-time number portability database. The primary number portability database is owned, operated and maintained by an independent company known as ©Telcordia Technologies, Inc. dba "iconnectiv." Because of the FCC mandate for number portability among all common carriers, a centralized real-time telephone number portability database needs to be employed for any and all telephone calls to be completed to the appropriate carrier network.
- 48. The number portability database essentially associates each and every telephone number with a landline or cellular carrier network identifier, enabling calls to be made to the proper landline or cellular carrier network. During the course of establishing each and every telephone call and to deliver those calls to the proper network servicing the called party numbers, the number portability database is queried in real-time so that calls can terminate in the proper carrier network and properly delivered to the called party. Due to the critical nature of this service, reliability of iconnectiv's database is among the highest in the telecommunications industry.
- 49. Iconnectiv, as well as other information services companies that provide wholesale access to iconnectiv's database, is commonly employed by telemarketing companies to analyze databases or lists of telephone numbers prior to calling them using an automatic telephone dialing system. Iconnectiv and its client wholesalers lease and maintain access to the number portability database enabling organizations to definitively know whether any telephone numbers in a list of numbers are cellular or not. I have personally been involved with contracting these organizations to obtain this telephone number data, both for wireless network products I have designed and in many TCPA cases.
 - 50. Telephone numbers included in account records being serviced by telemarketers are

⁴http://www.iconectiv.com/numbering/number-portability-administration-center-npac.

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typically "scrubbed" by either iconnectiv or its client wholesalers to determine which ones are cellular telephone numbers prior to being added to a campaign of numbers to be called by an automatic telephone dialing system. "Scrubbing" is a term used to describe a process by which a list of telephone numbers is compared against another list of telephone numbers having additional parameters associated with those numbers. If a telephone number is determined to be a cellular telephone number by this "scrubbing" process, it can be treated appropriately and in accordance with all local, state and federal statutes and regulations. For example, organizations need to recognize whether a telephone number is a landline or cellular number, and treat them appropriately so that they do not initiate automatic calls in potential violation of the TCPA.

51. Based on my knowledge, education, experience, expertise and training, it is my opinion that consumers' telephone numbers can be definitively and clearly determined to be either cellular or landline numbers. Furthermore, the ability to do so is an inexpensive and straightforward administrative process commonly used in the telemarketing industry. Therefore, the Defendant certainly has the ability to subscribe to iconnectiv's number portability database to avoid calling cellular telephone numbers using an automatic telephone dialing system.

DETERMINING "DO NOT CALL" NUMBERS

- 52. There exist several commercially available third-party information service companies that collect, maintain and analyze telephone number data for various commercial information purposes. Beside analyzing whether telephone numbers are cellular numbers or landline numbers, these information service companies can also analyze a list of telephone numbers against federal and state Do Not Call ("DNC") lists. These companies are commonly employed by telemarketing companies to ensure that numbers on the DNC lists are not called.
- 53. I have a great deal of personal and technical experience with third-party information service companies such as A.B. Data, Ltd.⁵ ("A.B. Data"), CompliancePoint⁶ (a subsidiary of PossibleNOW, Inc.) and Contact Center Compliance Corporation, which are all well-known organizations that either maintain or have access to extensive databases to ensure that

See http://www.ABDataClassAction.com/services/notice-administration.

See http://www.CompliancePoint.com.

See http://www.DNC.com.

telemarketers comply with federal and state telemarketing laws. Each of these companies provide services to analyze data and compare a list of telephone numbers against the federal DNC database as well as various state operated DNC databases. Telephone numbers are "scrubbed" by these companies to determine which ones are contained in the various DNC databases so that telemarketers are assured that they are only calling permissible numbers.

54. Based on my knowledge, education, experience, expertise and training, it is my opinion that consumers' telephone numbers can be definitively and clearly determined to be either on federal and state DNC lists or not. Furthermore, the ability to do so is an inexpensive and straightforward administrative process commonly used in the telemarketing industry.

ASCERTAINABILITY

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- 56. Many third-party information service companies provide various class action administration and complex litigation support services. I have personally been involved with A.B. Data and their extensive information service capabilities. A.B. Data is at least one organization that has the ability to identify and provide current contact information for individuals based on telephone numbers as well as other provided account record data.
- 57. A.B. Data has access to a complete and accurate database, updated daily, of all telephone numbers and related information used in the United States. For each telephone number in the United States, A.B. Data accesses the associated telecommunications carrier, whether the number is a landline number or cellular number, and the porting history of the telephone number. In fact, A.B. Data can access this information for any given date or timeframe in the past, regardless of whether the number was ever ported before or after that date. I have been personally involved in contracting with A.B. Data to provide telephone number data analysis in several TCPA class action lawsuits.
 - 58. Additionally, A.B. Data partners with reputable data processors and vendors such as

⁸See http://www.peachtreedata.com/ncoa/.

LexisNexis, Experian Information Solutions, Inc., Nexxa Group Inc., as well as many others. Using additional information from these data processors, A.B. Data has the ability to obtain the owner's name of the telephone subscription associated with the telephone number and the owner's address during the timeframe the subscription was in service. Furthermore, A.B. Data can obtain the latest contact information for the owner of the telephone subscription at some time in the past by using databases provided by the United States Postal Service ("USPS"). The USPS maintains the National Change of Address database ("NCOALink"), which is updated daily and contains approximately 160 million change of address records for the past four years. If current address information is unavailable via the USPS, A.B. Data can access credit reporting agencies' information or other data to obtain address information.

- 59. Due to these data processor partnerships, A.B. Data has access to detailed past and present contact data about individuals associated with a telephone number for any timeframe in the past, up to potentially ten years. Hence, A.B. Data has the ability to cross-reference individual telephone number data from various data resources with telephone subscriber data obtained from their partners, thus revealing names, addresses and current contact information for individuals who used a particular telephone number during a particular timeframe in the past.
- 60. Furthermore, because of A.B. Data's extensive data analysis capabilities, purported issues concerning number portability, the recycling of telephone numbers, family plans, business plans and pre-paid telephone plans are unlikely to affect the ability of companies of this sort to identify the subscriber of a telephone number within the last four years.

CONCLUSIONS

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18	69. Telephone numbers can be determined to be either cellular or landline numbers
19	using a straightforward administrative process.
20	70. Telephone numbers can be determined to be included on the federal and state DNC
21	lists using a straightforward administrative process.
22	71. Current contact information can be definitively ascertained based on the name,
23	telephone number and email address account record information stored by SolarCity.
24	SUMMARY OF OPINIONS
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- 76. It is my opinion, based on my knowledge, education, experience, expertise, training and the facts described above that telephone numbers can be determined to be either cellular or landline telephone numbers. Furthermore, the ability to do so is a commonly-practiced and straightforward administrative process.
- 77. It is my opinion, based on my knowledge, education, experience, expertise, training and the facts described above that telephone numbers can be determined to be included on the federal and state DNC lists. Furthermore, the ability to do so is a commonly-practiced and straightforward administrative process.
- 78. It is my opinion, based on my knowledge, education, experience, expertise, training and the facts described above that individuals' current contact information can be definitively and clearly ascertained
- 79. My opinions in this Declaration are based upon extensive experience in the telecommunications industry, a detailed understanding of telecommunications systems and a detailed understanding of automatic telephone dialing systems. I hereby reserve the right to supplement or modify my opinions detailed in this report to the extent that new information is

made available through discovery or other means.

I declare that the foregoing is true and correct subject to the laws of perjury of the United States.

Executed in Las Vegas, Nevada, on this 15th day of December, 2016.

Randall A. Snyder

Randall A. Snyder

EXHIBIT A

Professional Summary

Mr. Snyder has over 30 years of experience in telecommunications network and system architecture, engineering, design and technology. He has expertise in the fields of both wireline and wireless telecommunications networking technology. He has been retained as an expert witness in over 130 cases regarding telecommunications technology including nearly 100 Telephone Consumer Protection Act (TCPA) cases, patent cases and other areas of litigation regarding telecommunications network technology.

Mr. Snyder has taught many classes and seminars on both wireline and wireless telecommunication network technologies and has been a panelist and speaker at numerous conferences at the Institute of Electrical and Electronics Engineers (IEEE) and the Cellular Telecommunications and Internet Association (CTIA). He spent several years developing network technology standards within the American National Standards Institute (ANSI) and the Telecommunications Industry Association (TIA), providing technical contributions and authoring and editing telecommunications proposed standards documents. Most notably, ANSI-93, providing interconnection technology between wireline and wireless telecommunications networks.

Mr. Snyder is the co-author of the McGraw-Hill books "Mobile Telecommunications Networking with IS-41," and "Wireless Telecommunications Networking with ANSI-41, 2nd edition" published in 1997 and 2001, respectively. He holds 29 patents on telecommunications networking technology and has been hired as a consultant by the CTIA, as well as many wireline and wireless telecommunications companies, including Bell Laboratories, IBM, Google, McCaw Cellular, AirTouch, AirTouch International, AT&T Wireless, AT&T Mobility, Lucent, Nokia, Ericsson, Motorola, Samsung, Siemens, Nextwave, MCI, Daewoo, Globalstar, T-Mobile, Sprint, U.S. Cellular, Teleglobe Canada, Teledesic and others. He was also nominated in 2006 for a National Television Arts Emmy Award for Outstanding Achievement in Advanced Media Technology for unique wireless content distribution technology he designed while at Entriq, Inc.

Subject Matter Expertise

- Wireless and cellular network systems
- Wireless and cellular network architectures
- Network interconnectivity
- GSM, UMTS, LTE and ANSI-41 (CDMA) standards and networks
- Location Based Services (LBS)
- Short Message Service (SMS)
- Multimedia Message Service (MMS)
- Wireless Application Protocol (WAP)

- Call Processing and Calling Features
- Billing Systems Support (BSS)
- Operations, Administration, Maintenance & Provisioning (OAM&P, OSS)
- Signaling System No. 7 (SS7)
- LTE Diameter Signaling
- Multifrequency Signaling
- Automatic Telephone Dialing Systems (ATDS)

Notable Expert Witness Engagements

Retained as Plaintiff's testifying expert witness in Satterfield v. Simon & Schuster, Inc. No. 07-16356,
 D.C. No. CV-06-02893-CW Opinion. Appeal from the United States District Court for the Northern District of California. Opinion remanded by the United States Court of Appeals for the Ninth Circuit. Personally cited in opinion by N.R. Smith, Circuit Judge, June 19, 2009.

Result of expert opinion greatly expanded the TCPA and was followed by formal FCC Declaratory Rulings citing this case that text messages are calls as defined by the TCPA, and sending messages to a stored electronic list of telephone numbers falls within the definition of an Automatic Telephone Dialing System (ATDS).

- Retained as Plaintiff's testifying expert witness in *Gomez v. Campbell-Ewald Company*. No. 13-55486, D.C. No. 2:10-CV-02007-DMG-CW Opinion. Appeal from the United States District Court for the Central District of California. Opinion vacated by the United States Court of Appeals for the Ninth Circuit. Opinion by Fortunato P. Benavides, Circuit Judge. Filed September 19, 2014. Appellate court opinion upheld by the Supreme Court of the United States. Opinion by Justice Ginsburg, January 20, 2016.
- Retained by the Department of Justice Canada as Plaintiff's consulting expert in Commissioner of Competition v. Rogers Communications Inc., Bell Canada, Telus Corporation and the Canadian Wireless Telecommunications Association. Defendants accused of deceptive and misleading marketing practices related to premium text messages leading to improper charging for multimedia content delivery using various mobile billing mechanisms. Case settled favorably for the Canada Competition Bureau in May, 2016.
- Retained by IBM de México as testifying expert witness in *IBM de México Comercialización y Servicios*, *S. de R.L. de C.V. adverse Iusacell*, *S.A. de C.V.* International \$4B material breach of contract case under the International Chamber of Commerce International Court of Arbitration. A decision is currently being deliberated by the international court.

Education

Year College or University Degree

1984 Franklin and Marshall College B.A., Mathematics (minor in Astronomy)

Professional Experience

From: January 2007
To: Present

Organization: Wireless Research Services, LLC; Las Vegas, NV

Title: President and Founder

Summary: Technology and expert witness consulting services. Areas of subject matter expertise

include mobile and cellular networking, 2G, 2.5G, 3G, LTE, GSM, ANSI-41, LBS, SMS, MMS, WAP, SS7, Diameter Signaling, Automatic Telephone Dialing Systems (ATDS) and mobile multimedia systems. With this expertise, primary consulting is in

the area of system and product analysis, architecture, design, development,

management and marketing as well as patent preparation and development, expert reports, expert testimony and litigation support. Particular areas of expert witness experience include patent litigation and the Telephone Consumer Protection Act

(TCPA).

From: September 2007 To: August 2010

Organization: Finsphere Corporation; Bellevue, WA

Title: Vice President Product Management & Wireless Engineering

Summary: Was among the first handful of employees at Finsphere prior to Series A funding. As

vice president of product management and wireless engineering and a member of the executive management team, was responsible for product management activities and wireless technology solutions for Finsphere's products. These products encompassed mobile location based software-as-a-service (SaaS) products offered primarily to financial institutions and banks. Responsibilities included product requirements and system functionality, strategic planning, R&D of new technologies, wireless network interconnectivity as well as wireless technology for Finsphere's products. Was also responsible for market strategies, white papers and development and management of

intellectual property and patent applications.

From: May 2004 To: April 2007

Organization: Entriq, Inc.; Carlsbad, CA

Title: Vice President Product Management

Summary: Was responsible for the entire product management team and system architecture for

Entriq's products and services. Products encompassed mobile and broadband pay media applications (specializing in video), digital rights management (DRM) and security solutions, e-commerce and m-commerce systems as well as ad management and delivery solutions for both broadband and mobile media services. Responsibilities also included network and protocol analysis, market analysis, evaluation of third-party software and services, all vendor contract negotiations, RFP responses and overall administrative responsibility for the entire product line. Was responsible for directing

and managing the technical writing department producing all user documentation associated with the products. Was nominated for a National Television Arts and Sciences Emmy Award for Outstanding Achievement in Advanced Media Technology for unique mobile technology designed, developed and commercially deployed as part of Entriq's solution.

From: February 2002 To: November 2003

Organization: m-Qube, Inc. (acquired by Verisign); Boston, MA

Title: Vice President Product Management and Carrier Marketing and Founder

Summary: Was responsible for the entire product management and carrier marketing teams,

member of the executive management team and one of the founders. Was responsible for all product management, system engineering and product strategy for all business conducted with the wireless industry and carriers. Was in charge of the market strategy and wireless network architecture for m-Qube's mobile marketing service, a value-added service offering mobile marketing solutions to wireless carriers using short message services (SMS) for GSM and CDMA networks. The service architecture enabled branded companies to deploy promotional marketing and messaging campaign dialogs with mobile subscribers via SMS. The network architecture required definition

and design of all aspects of the overall network including SMS technology, interconnectivity to the wireless carriers, signaling, traffic management, market requirements for features and services, network equipment specifications and OA&M.

From: April 2001 To: February 2002

Organization: Bitfone Corporation; Mountain View, CA

Title: Vice President Product Management and Marketing

Summary: Was responsible for the entire product management team and all of the company's

product definitions, strategies and positioning. Had direct responsibility for market and product requirements, market research, competitive analysis, product strategy and sales strategy. Bitfone's products included the iBroker, a mobile Internet technology

infrastructure platform to enhance WAP, MMS, mobile e-mail and wireless

messaging. Was also responsible for the mProve product (obtained via merger with Digital Transit, Inc.) providing over-the-air firmware and software update technology

to mobile devices.

From: November 2000 To: April 2001

Organization: Openwave Systems (via merger of Phone.com and Software.com); Redwood City, CA

Title: Executive Director Emerging Technologies

Summary: Was responsible for new 3G technologies and providing market and product plans for

those technologies for the entire product line. Primary responsibility for the 3GPP Multimedia Messaging Service (MMS), collecting market requirements from

customers, developing corporate strategy for MMS and preparing the organization for

additional development of the product. In addition, taught wireless technology classes to the different departments at Openwave and educated them on wireless service provider strategies and network technologies.

From: March 2000 To: November 2000

Organization: @Mobile and Software.com (via acquisition); Santa Barbara, CA

Title: Director Wireless Product Management

Summary: Was responsible for the product managers and for all of the wireless internet

infrastructure products. Responsibilities included the overall market and product strategy for Software.com's wireless e-mail, short message service, instant messaging and unified messaging products. Was responsible for the overall revenues generated from these products based on detailed product plans and internal organizational planning. Much of his time was spent working with the executive management team

and the sales directors on corporate market strategy.

From: December 1999 To: March 2000

Organization: FreeSpace Communications, Inc.; Palo Alto, CA

Title: Consulting Network Systems Engineer

Summary: Was responsible for the complete design of the backbone network architecture for a

new broadband fixed wireless data network. This new architecture incorporated DSL as the backbone network technology. The network architecture required definition and design of all aspects of the overall network plan including DSL technology, IP technology, ATM technology, interconnectivity to the PSTN, operations signaling, traffic engineering, market requirements for network features and services, network

equipment specifications and OA&M.

From: April 1992 To: December 1999

Organization: Synacom Technology, Inc.; San Jose, CA

Title: Executive Director Product Marketing and Management

Summary:

1998 – 1999 Executive Director Product Marketing and Management

 Responsible for managing the entire product management and marketing department of Synacom Technology, including market research and planning, product management and market communications. Lead the entire design, definition and product direction of all aspects of Synacom's products.

1997 – 1998 Director Systems Engineering

 Responsible for coordinating and managing the overall functional and requirements specifications for all Synacom's products as well as the detailed test

plans used for alpha system testing of those products. Also responsible for directing and managing the technical writing department producing all of the user documentation associated with all of the products. Provided the primary sales engineering support for sales and marketing and was involved in nearly every aspect of the product lifecycle.

1996 - 1997

Director Consulting Services and Principal Engineer

Responsible for obtaining, coordinating and managing all technical consulting projects performed by the company. These projects included wireless network architecture and design for both IS-41 and GSM networks for dozens of client companies (carriers and equipment manufacturers). In this role, continued as a member of both the ANSI/TIA TR45.2 Subcommittee for cellular radio intersystem operations standards and the ANSI/TIA TR46 Committee for 1900 MHz GSM PCS standards. Major contributor to TR46 in the area of GSM-to-IS-41 network interworking. Also authored, edited and published TIA standard specification IS-93 for cellular network interconnections to the PSTN and ISDN.

1992 - 1996

Principal Engineer

- Consulted for McCaw Cellular, AT&T Wireless, AirTouch Cellular, AirTouch Satellite Services, Globalstar, Nokia, MCI, Sprint PCS, XYPoint, NextWave, NewNet American Personal Communications, CTIA and several other national and international wireless telecommunications companies.
- Wrote wireless network design and analysis papers including HLR specifications. Authentication Center specifications, PCS network design, short message service (SMS) design, intelligent network applications of wireless technology and in-house expert in signaling protocols. Extensive experience with Signaling System No. 7, including both protocol implementation and design. Authored the Standard Requirements Document for the SS7-based A-interface between the base station and MSC used throughout the TIA. Also involved in the design of the Bellcore WACS/PACS technology, digital cellular network service and feature descriptions, SCPs and HLRs. Extensive experience developing the architecture and design of distributed intelligent networks including, SS7, cellular, PCS, AIN and WIN networks. Key member of the original Cellular Digital Packet Data (CDPD) architecture and design team. Designed the CDPD air interface protocol emulator developed and marketed by AirLink Communications, Inc.

From: December 1990 **April** 1992 To:

AT&T Bell Laboratories: Whippany, NJ Organization: Title: Consulting Member of the Technical Staff

Summary: Evaluated wireless technology services for the Wireless Systems Architecture group. Also participated as a system engineer on the design of the Global System for Mobile

(GSM) communication architecture and a software engineer developing the base station controller (BSC) for GSM. Also responsible for planning, coordinating, designing and testing the SS7 protocol software for the GSM A-interface between the BSC, MSC and operations and maintenance center (OMC). High-level and detailed

design specifications were developed to coordinate the protocol testing between two remote laboratories. Provided the traffic analysis and traffic engineering of call traffic for the BSC. Specifically designed and developed the dynamic traffic overload control subsystem for the BSC. Presentations were given to technical staffs at multiple Bell Laboratories facilities supporting this work.

From: May 1987 To: December 1990

Organization: DGM&S, Inc.; Mt. Laurel, NJ Title: Senior Staff Consultant

Summary: Responsible for the design, development and test coordination of an advanced

intelligent network applications platform for a service control point (SCP). Also spent several years as a consulting software engineer for Siemens AG, developing and testing SS7 and call control software for the EWSD digital switching system for international as well as U.S. national network implementations. This work involved extensive travel to both Frankfurt and Munich, Germany for software system design and testing. Also involved in the concept, design and technical marketing of

proprietary enabling technology software products for SS7 and ISDN.

From: May 1986 To: May 1987

Organization: ADP, Inc.; Mt. Laurel, NJ

Title: Senior Software Engineer and Analyst

Summary: Responsible for the design and development of data communications and real time

database application software for a host data center that provided real time financial information to large brokerage houses. Data communication protocol expertise in

HDLC, RS-232 and IBM BiSync.

From: June 1984 To: May 1986

Organization: C3, Inc.; Cape May, NJ

Title: Consulting Systems Analyst and Software Engineer

Summary: Civilian consulting systems analyst and engineer to the U.S. Coast Guard Electronics

Engineering Center (EECEN) for C3, Inc. Developed sophisticated database software for shipboard use including inventory and law enforcement applications. The work included the follow-through of the entire project lifecycle including writing of

requirements, functional, design and program specifications, coding, debugging, alpha and beta testing, release, shipboard installation and continuing technical support of the product. Received a personal commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, for successful efforts on these projects.

Professional Affiliations, Achievements & Awards

- Personal commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, USCG (1986)
- Nominated, Technology and Engineering Emmy Award for Outstanding Achievement in Advanced Media Technology, 2006

Patents, Publications & Citations

Issued Patents

Patent	Date	Description
US 9,185,123	11/10/2015	Systems and Method for Mobile Identity Protection for Online User Authentication
US 9,154,952	10/6/2015	Systems and Methods for Authenticating a User of a Computer Application, Network, or Device Using a Wireless Device
US 9,092,803	7/28/2015	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,954,102	2/10/2015	System and Method for Determining and Delivering Appropriate Multimedia Content to Data Communication Devices
US 8,938,215	1/20/2015	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,923,902	12/30/2014	Mobile Messaging Short Code Translation and Routing System and Method
US 8,839,394	9/16/2014	Systems and Methods for Authenticating a User of a Computer Application, Network, or Device Using a Wireless Device
US 8,831,564	9/9/2014	System and Method for Mobile Identity Protection Using Mobile Device Signaling Network Derived Location Pattern Recognition
US 8,819,141	8/26/2014	Centralized Mobile and Wireless Messaging Opt-out Registry System and Method
US 8,761,732	6/24/2014	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,670,753	3/11/2014	System and Method for Determining and Delivering Appropriate Multimedia Content to Data Communication Devices
Israel 200949	1/10/2014	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
Mexico 308720 B	12/4/2013	Sistema y Metodo para el Analisis Automatizado que Compara una Ubicacion del Dispositivo Inalambrico con Otra Ubicacion Geografica

US 8,588,748	11/19/2013	System and Method for Mobile Identity Protection of a User of Multiple Computer Applications, Networks or Devices
US 8,437,784	5/7/2013	System and Method to Initiate a Mobile Data Communication
		Utilizing a Trigger System
US 8,374,634	2/12/2013	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
US 8,280,348	10/2/2012	System and Method for Mobile Identity Protection Using
05 0,200,5 10	10,2,2012	Mobile Device Signaling Network Derived Location Pattern
		Recognition
US 8,155,677	4/10/2012	Mobile Messaging Short Code Translation and Routing System
, ,		and Method
New Zealand 580499	8/31/2012	System and Method for Automated Analysis Comparing a
		Wireless Device Location with Another Geographic Location
US 8,131,262	3/6/2010	System and Method to Initiate a Mobile Data Communication
		Utilizing a Trigger System
US 8,116,731	2/14/2012	System and Method for Mobile Identity Protection of a User of
		Multiple Computer Applications, Networks or Devices
Australia 2008/115299	2/9/2012	System and Method for Automated Analysis Comparing a
		Wireless Device Location with Another Geographic Location
S. Africa 2009/06947	1/26/2011	System and Method for Automated Analysis Comparing a
		Wireless Device Location with Another Geographic Location
US 7,792,518	9/7/2010	System and Method to Initiate a Mobile Data Communication
110 7 402 700	7/22/2000	Utilizing a Trigger System
US 7,403,788	7/22/2008	System and Method to Initiate a Mobile Data Communication
IIC (120 200	10/2/2000	Utilizing a Trigger System
US 6,128,389	10/3/2000	Authentication Key Management System and Method
US 5,970,144	10/19/1999	Secure Authentication-Key Management System and Method for Mobile Communications
110 5 950 445	12/15/1998	
US 5,850,445 US 5,799,084	8/25/1998	Authentication Key Management System and Method System and Method for Authenticating Cellular Telephonic
00 5,133,004	0/23/1770	Communication

Publications

- 1. What Workers Want from Wireless by Randall A. Snyder; April 15, 2004. America's Network, Advanstar Communications, Santa Ana, California USA.
- 2. Snyder, Randall A. and Gallagher, Michael D. Wireless Telecommunications Networking with ANSI-41 Second Edition; McGraw-Hill, New York, NY USA; © Copyright 2001 Randall A. Snyder and Michael D. Gallagher. Foreword by Tom Wheeler, current Chairman, Federal Communications Commission.
- 3. <u>Forecasting SS7 Traffic</u> by Randall A. Snyder; November 1, 2000. Wireless Review, Volume 17, Number 21, Intertec Publishing, Overland Park, KS USA.
- 4. Gallagher, Michael D. and Snyder, Randall A. Mobile Telecommunications Networking with IS-41; McGraw-Hill, New York, NY USA; © Copyright 1997 Michael D. Gallagher and Randall A. Snyder.
- 5. <u>IS-41/GSM Interoperability</u> by Randy Snyder; December, 1995, Cellular Networking Perspectives, Cellular Networking Perspectives, LTD, Calgary, Alberta, Canada.

Citations

- 1. Commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, USCG (1986).
- 2. Method and Apparatus for Routing Short Messages, US Patent #6308075, Issued October 23, 2001.
- 3. Mediation Software for Delivery of Interactive Mobile Messaging and Personalized Content to Mobile Devices. Patent Application # 20020120779, August 29, 2002.
- 4. Automatic In-Line Messaging System, US Patent #6718178, Issued April 6, 2004.
- 5. Method and System for Wireless Instant Messaging, US Patent #7058036, Issued June 6, 2006.
- 6. <u>United States Court of Appeals for the Ninth Circuit</u>. Satterfield v. Simon & Schuster, Inc. No. 07-16356, D.C. No. CV-06-02893-CW Opinion. Appeal from the United States District Court for the Northern District of California. Opinion by N.R. Smith, Circuit Judge. Filed June 19, 2009.

Litigation Support Experience

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Law Office of Michael A. Ziegler, P.L. Case Name: Francescutti v. The CBE Group, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Haines & Krieger, LLC

Case Name: Self-Forbes v. Advanced Call Center Technologies, LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Engstrom, Lipscomb & Lack

Case Name: Nghiem v. Dick's Sporting Goods, Inc.

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

Law Firm: United States Department of Justice (DOJ)

Case Name: CellCast Technologies, LLC v. The United States of America

Services Provided: Testifying expert, expert reports for defendant

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: McGuire Law, P.C.

Case Name: Katz v. American Honda Motor Co., Inc.
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Bursor & Fisher, P.A.
Case Name: Morris v. SolarCity Corp.
Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Keller Rohrback, L.L.P.
Case Name: Wick v. Twilio, Inc.

Services Provided: Consulting expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Edelman, Combs, Latturner & Goodwin, LLC Case Name: Bailey v. Santander Consumer USA, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Bailey & Glasser LLP

Case Name: Newhart v. Quicken Loans, Inc. et al.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Manchee & Manchee, PC

Case Name: Gibbs v. Ocwen Loan Servicing, LLC

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Maney & Gordon, P.A.

Case Name: Holland v. Keesler Federal Credit Bureau

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Spencer v. Kohl's Department Stores, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Parisi & Havens LLP
Case Name: Slovin v. SunRun. Inc.
Sawiges Provided: Testifying expert for pl

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Law Office of Chris R. Miltenberger, PLLC

Case Name: Harrington v. RoundPoint Mortgage Servicing Corporation

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to short

message service (SMS) technology

Law Firm: Law Office of Troy D. Krenning, LLC

Case Name: Newton v. Comdata, Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Settled Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Bursor & Fisher, P.A.

Case Name: Yerkes v. RGS, Financial, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Settled Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Manning Law APC

Case Name: Vizcarra v. Macys.com Inc. et al.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Sulaiman Law Group, Ltd.

Case Name: Deaderick v. Contract Callers, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Withdrawn Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Zeidel v. A&M (2015) LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing
Date: 2015 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Marquis Aurbach Coffing

Case Name: Fisher v. MJ Christensen Jewelers, LLC Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing
Date: 2015 – 2016

Type of Matter: Competition Act, § 74.1 R.S.C. 1985, c. C-34 class action related to false and

misleading advertisements related to premium text messaging and short message

service (SMS) technology

Law Firm: Department of Justice Canada

Case Name: Commissioner of Competition v. Rogers Communications Inc., Bell Canada,

Telus Corporation and the Canadian Wireless Telecommunications Association

Services Provided: Consulting expert for plaintiff

Disposition: Settled
Date: 2013 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Maney & Gordon, P.A.

Case Name: Ritter v. Wells Fargo Bank, N.A. Services Provided: Testifying expert for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Bock & Hatch, LLC
Case Name: Kozlow v. Shopkick, Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Withdrawn

Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Edelson PC

Case Name: Suttles v. Mutual of Omaha Insurance Company Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Manchee & Manchee, PC

Case Name: Gebray v. Ocwen Loan Servicing, LLC
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: California Invasion of Privacy Act (Penal Code §§ 630) class action related to

unlawful recording of telephone conversations

Law Firm: Keller Grover LLP and Law Offices of Scot D. Bernstein

Case Name: Saunders v. Cabela's Incorporated

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Lozano v. Avenue Stores, LLC Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Bailey & Glasser LLP
Case Name: Phillips v. Mozes, Inc. et al.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Intellectual property (patents) related to mobile location based technology and

short message service (SMS) technology

Law Firm: Knobbe, Martens, Olson & Bear, LLP

Case Name: TeleCommunication Systems, Inc. v. Airbus DS Communications, Inc.

Services Provided: Testifying expert for defendant

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Intellectual property (patents) related to machine-to-machine (M2M) mobile

technology

Law Firm: Paul Hastings LLP

Case Name: M2M Solutions LLC v. Novatel Wireless Solutions, Inc.

Services Provided: Testifying expert, USPTO affidavits for patent reexamination for defendant

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Mazie Slater Katz & Freeman LLC

Case Name: Meyer v. Bebe Stores Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Ongoing

Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Strategic Legal Practices, APC
Case Name: Haghayeghi v. Guess Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Bailey & Glasser LLP

Case Name: Stein v. Monterey Financial Services, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Aronovitz Law

Case Name: McKee v. Navient Solutions, Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Butsch Roberts & Associates, LLC Case Name: Moore v. Family Dollar Stores, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Bailey & Glasser LLP

Case Name: Jones v. FMS Corp., U.S. Department of Education

Services Provided: Testifying expert for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Tycko & Zavareei LLP

Case Name: Lathrop v. Uber Technologies, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2015

Expert Engagement:

Type of Matter: California Invasion of Privacy Act (Penal Code §§ 630) class action related to

unlawful recording of telephone conversations

Law Firm: Keller Grover LLP and Law Offices of Scot D. Bernstein

Case Name: Roberts v. Wyndham International, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

Law Firm: Paul Hastings LLP

Case Name: Nova Transforma Technologies, LLC v. AT&T Mobility LLC

Services Provided: Consulting expert, USPTO affidavits for patent reexamination for defendant

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Maney & Gordon, P.A.

Case Name: Drew v. Ocwen Loan Servicing, LLC

Services Provided: Testifying expert, expert reports, depositions, trial testimony for plaintiff

Disposition: Plaintiff obtained statutory damages for willful TCPA violations

Date: 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Parisi & Havens LLP

Case Name: Kleja v. Transworld Systems, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: California Invasion of Privacy Act (Penal Code §§ 630) class action related to

unlawful recording of telephone conversations

Law Firm: Keller Grover LLP and Law Offices of Scot D. Bernstein

Case Name: McCabe v. Six Continents Hotels, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2015

Expert Engagement:

Type of Matter: Material Breach of Contract Law Firm: Hogan Lovells USA LLP

Case Name: IBM de México Comercialización y Servicios, S. de R.L. de C.V. adverse

Iusacell, S.A. de C.V.

Services Provided: Testifying expert, expert reports for IBM México

Disposition: Ongoing
Date: 2014 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Caddell & Chapman

Case Name: Hooker v. Sirius XM Radio, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Settled
Date: 2014 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: McGuire Law, P.C.

Case Name: Valladares v. Blackboard, Inc. Services Provided: Testifying expert for plaintiff

Disposition: Settled
Date: 2014 – 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to

unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC

Case Name: Hamlett et al v. Santander Consumer USA Inc. et al Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled
Date: 2014 – 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Parisi & Havens LLP

Case Name: Lofton v. Verizon Wireless LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2014 – 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Spencer v. AT&T Digital Life, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Butsch Roberts & Associates, LLC

Case Name: In re: Life Time Fitness, Inc. Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Morgan & Morgan, P.A.

Case Name: Cauchon v. Whetstone Partners, LLC, d/b/a eTitleLoan

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

Law Firm: McGuireWoods LLP

Case Name: Comcast Cable Communications, LLC v. Sprint Communications Company L.P.

Services Provided: Consulting expert for defendant

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Bock & Hatch, LLC
Case Name: Kozlow v. Hangtime, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Parisi & Havens LLP Case Name: In re Collecto, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Edelson PC

Case Name: Birchmeier et al v. Caribbean Cruise Line, Inc. et al Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Keogh Law, Ltd.
Case Name: Johnson v. Yahoo! Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Jacobs Kolton, Chtd. Case Name: Nunes v. Twitter, Inc.

Services Provided: Consulting expert for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Manning Law, PLLC
Case Name: Manning v. Lendio, Inc.
Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: The Law Offices of Joseph R. Manning, Jr. Case Name: Vargem v. Tax Defense Partners, LLC

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Steptoe & Johnson PLLC

Case Name: Cain v. Monitronics, International, Inc. Services Provided: Consulting expert for defendant

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful cellular

telephone calls

Law Firm: Mantese Honigman Rossman and Williamson, P.C.

Case Name: Glassbrook v. Rose Acceptance, Inc. and First National Bank of America

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Kazerouni Law Group, APC
Case Name: Iniguez v. The CBE Group, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Keogh, Cox & Wilson, Ltd.

Case Name: Hetherington v. Omaha Steaks, Inc. and Omaha Steaks International, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Potter Handy, LLP

Case Name: Potter v. Bank of America Corporation
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Lemberg & Associates LLC

Case Name: Shiyan v. Lucille Roberts Health Clubs, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Withdrawn Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC

Case Name: Meyer v. Receivables Performance Management LLC

Services Provided: Testifying expert for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: McGuire Law, P.C.

Case Name: Murray v. Bill Me Later, Inc. Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC Case Name: Creel v. GC Services, L.P.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

and communication protocols

Law Firm: White & Case LLP

Case Name: Nokia Corporation v. Google Inc. Services Provided: Testifying expert for defendant

Disposition: Settled Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Gomez v. Campbell-Ewald Company

Services Provided: Consulting expert for plaintiff

Disposition: Ongoing Date: 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Francis & Mailman, P.C.
Case Name: Dominguez v. Yahoo! Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Ongoing
Date: 2013 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: McGuire Law, P.C.

Case Name: Smith v. Microsoft Corporation

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing
Date: 2013 – 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC

Case Name: Horton v. Cavalry Portfolio Services LLC

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Ongoing
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Law Office of Scott D. Owens, Esq. and Farmer, Jaffee, Weissing, Edwards,

Fistos & Lehrman, P.L.

Case Name: Legg v. Voice Media Group, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Edelson LLC
Case Name: Sterk v. Path, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Heyrich Kalish McGuigan, PLLC

Case Name: Gragg v. Orange Cab Company, Inc. et al

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Dismissed
Date: 2013 – 2015

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Wooten, Kimbrough & Normand, PA Case Name: Murphy v. DCI Biologicals, LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Kazerouni Law Group, APC Case Name: Sherman v. Yahoo! Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and Fair Debt

Collection Practices Act (FDCPA) 15 U.S.C. 15 § 1692 related to unlawful

cellular telephone calls

Law Firm: Collins & Story, PA

Case Name: Keen v. Delta Outsource Group, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

and mobile banking

Law Firm: Panovia Group LLP

Case Name: N5 Technologies, LLC v. Capital One, N.A. et al

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and California's

Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 class action related to

short message service (SMS) technology

Law Firm: Hartmann and Kananen Case Name: Baird v. Sabre, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed
Date: 2013 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: Edelson LLC

Case Name: Lee v. Stonebridge Life Insurance Company

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled
Date: 2012 – 2014

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

and multimedia message service (MMS) technology

Law Firm: Baker Botts LLP

Case Name: Intellectual Ventures LLC v. AT&T Mobility LLC, T-Mobile USA, Inc., Sprint

Spectrum L.P., US Cellular Corporation

Services Provided: Testifying expert, expert reports for defendants

Disposition: Patent withdrawn from litigation

Date: 2012 – 2014

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Keogh Law, Ltd.

Case Name: Wanca v. LA Fitness International, LLC

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC
Case Name: Penn v. NRA Group, LLC
Services Provided: Consulting expert for plaintiff

Disposition: Ongoing Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC
Case Name: Reed v. GC Services LP
Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: The Lavery Law Firm

Case Name: Volpe v. Caribbean Cruise Line, Inc. Services Provided: Consulting expert for plaintiff

Disposition: Consulting expert for p

Dismissed

Disposition: Dismisse 2013

Expert Engagement:

Type of Matter: Washington Consumer Protection Act, RCW 19.86 and RCW 80.36.400 related

to unfair business practices and unlawful cellular telephone calls

Law Firm: Williamson and Williams Law

Case Name: Kids Northwest v. First Data Corporation

Services Provided: Consulting expert for plaintiff

Disposition: Ongoing Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: George Rikos Law

Case Name: Van Patten v. Vertical Fitness

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing

Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and California

Business and Professions Code § 17200 class action related to short message

service (SMS) technology

Law Firm: Milberg LLP

Case Name: D'Agostino v. Jesta Digital, LLC (dba Jamster)
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and Restrictions

on Telemarketing, Telephone Solicitation, and Facsimile Advertising 47 C.F.R.

§ 64.1200(d)(3) class action related to unlawful cellular telephone calls

Law Firm: Burke Law Offices, LLC Case Name: Benzion v. Vivint, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Lemberg & Associates LLC

Case Name: Rutigliano v. Convergent Outsourcing, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Ongoing Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Kazerouni Law Group, APC

Case Name: Emanuel v. The Los Angeles Lakers, Inc.
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Kazerouni Law Group, APC
Case Name: Barani v. Wells Fargo Bank, N.A.
Services Provided: Consulting expert for plaintiff

Disposition: Settled

Date: 2013

Expert Engagement:

Type of Matter: Intellectual property (patents) related to wireless calling party identification

technology

Law Firm: K&L Gates LLP

Case Name: Cequint Inc. v. Apple Inc.
Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Donald A. Yarbrough, Esq.

Case Name: Mais v. Gulf Coast Collection Bureau, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed on appeal

Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Donald A. Yarbrough, Esq.

Case Name: Manno v. Healthcare Revenue Recovery Group, LLC Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: Law Office of Scott D. Owens, Esq.

Case Name: Wojcik v. Buffalo Bills, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2012 – 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: Law Office of Scott D. Owens, Esq.

Case Name: Keim v. ADF Midatlantic, LLC (Pizza Hut)

Services Provided: Testifying expert for plaintiff

Disposition: Ongoing

Date: 2012 – 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful cellular telephone calls

Law Firm: Liner Grode Stein Yankelevitz Sunshine Regenstreif & Taylor LLP

Case Name: Connelly v. Hilton Grand Vacations Company, LLC Services Provided: Testifying expert, expert reports, depositions for defendant

Disposition: Dismissed
Date: 2012 – 2013

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Kirby Law Group

Case Name: Agne v. Papa John's International, Inc. et al

Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2012

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action and

NY GBL 399-P class action related to unlawful calls

Law Firm: Bellin and Associates LLC

Case Name: Tipoo v. Enhanced Recovery Company, LLC

Services Provided: Testifying expert for plaintiff

Disposition: Undisclosed

Date: 2012

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful calls

Law Firm: Burke Law Offices, LLC

Case Name: Bailey v. Household Finance Corporation et al Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Undisclosed Date: 2011 – 2012

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Burke Law Offices, LLC
Case Name: Annoni v. FYISMS.com, LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Undisclosed Date: 2011 – 2012

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Schrock v. Wenner Media LLC Services Provided: Consulting expert for plaintiff

Disposition: Undisclosed

Date: 2011

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: Summit Law Group

Case Name: Kramer v. Autobytel, Inc. and B2Mobile, LLC

Services Provided: Consulting expert for defendant

Disposition: Settled Date: 2011

Expert Engagement:

Type of Matter: Intellectual property (patents) related to wireless location based services (LBS)

Law Firm: Mintz, Levin, Cohn, Ferris, Glovsky and Popeo PC

Case Name: Emsat Geolocation Technology, LLC v. CellCo Limited Partnership (dba

Verizon Wireless) et al

Services Provided: Testifying expert, USPTO affidavits for patent reexamination for plaintiff

Disposition: Undisclosed Date: 2010 – 2011

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful calls

Law Firm: Keogh Law, Ltd.

Case Name: Griffith v. Consumer Portfolio Services, Inc. Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Undisclosed Date: 2010 – 2011

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful calls

Law Firm: Keogh Law, Ltd.

Case Name: Dobbin v. Wells Fargo Auto Finance, Inc.
Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Dismissed
Date: 2010 – 2011

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

Law Firm: Nelson Bumgardner Casto PC
Case Name: Celltrace LLC v. AT&T Inc. et al
Consulting expert for plaintiff

Disposition: Undisclosed

Date: 2010

Expert Engagement:

Type of Matter: California Constitution, Article VI, § 10, class action related to short message

service (SMS) technology and unlawful charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: VanDyke v. Media Breakaway, LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2009

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to unlawful calls

Law Firm: Gordon & Rees LLP

Case Name: Allen v. Rickenbacker Collection Services

Services Provided: Consulting expert for defendant

Disposition: Undisclosed

Date: 2009

Expert Engagement:

Type of Matter: Intellectual property (trademarks) related to short message service (SMS)

technology

Law Firm: Fish & Richardson P.C.

Case Name: Cricket Communications, Inc. v. HipCricket, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Undisclosed Date: 2008 – 2009

Expert Engagement:

Type of Matter: California Constitution, Article VI, § 10, class action related to short message

service (SMS) technology and unlawful charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Albrecht v. mBlox, Inc. et al

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2008 – 2009

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

related to short message service (SMS) technology

Law Firm: Blim & Edelson, LLC

Case Name: Satterfield v. Simon & Schuster, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled
Date: 2007 – 2009

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Walker v. Motricity, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Rynearson v. Motricity, Inc.

Services Provided: Testifying expert, expert reports, depositions for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: California Constitution, Article VI, § 10, class action related to short message

service (SMS) technology and unlawful charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Reed v. Sprint Nextel Corporation

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Paluzzi v. CellCo Limited Partnership (dba Verizon Wireless) and mBlox. Inc.

Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Nava v. Predicto Mobile, LLC Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: McFerren v. AT&T Mobility, LLC Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 class

action related to short message service (SMS) technology and unlawful charging

of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Guerrero v. MobileFunster, Inc. Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Computer Fraud and Abuse Act, 18 U.S.C. Article § 1030, class action related to

short message service (SMS) technology and unlawful charging of cellular

telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Gray v. Mobile Messenger Americas, Inc.

Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Goddard v. Google, Inc.
Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Duffy v. Nevis Mobile, LLC
Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Criswell v. MySpace, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Undisclosed

Date: 2008

Expert Engagement:

Type of Matter: Class Action Fairness Act of 2005, 28 U.S.C. §§ 1332, 1453 and 28 U.S.C. §

1367(a) class action related to short message service (SMS) technology and

unlawful charging of cellular telephone customers

Law Firm: KamberEdelson, LLC
Case Name: Bradberry v. mBlox, Inc.
Services Provided: Consulting expert for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: California Constitution, Article VI, § 10, class action related to short message

service (SMS) technology and unlawful charging of cellular telephone customers

Law Firm: KamberEdelson, LLC

Case Name: Ayers v. Media Breakaway, LLC

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2008

Expert Engagement:

Type of Matter: Intellectual property (patents) related to wireless location based services (LBS)

Law Firm: Hahn Loeser & Parks, LLC

Case Name: Emsat Geolocation Technology, LLC v. CellCo Limited Partnership (dba

Verizon Wireless) et al

Services Provided: Consulting expert for plaintiff

Disposition: Undisclosed

Date: 2008

Expert Engagement:

Type of Matter: Class action related to short message service (SMS) technology and unlawful

charging of cellular telephone customers

Law Firm: Blim & Edelson, LLC

Case Name: Valdez v. Sprint Nextel Corporation Services Provided: Consulting expert for plaintiff

Disposition: Settled

Randall A. Snyder Curriculum Vitae

Date: 2007

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 201 class action

related to short message service (SMS) technology and unlawful charging of

cellular telephone customers

Law Firm: Blim & Edelson, LLC

Case Name: Bradberry v. T-Mobile USA, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2007

Expert Engagement:

Type of Matter: California Computer Crime Law, Cal. Pen. Code § 502 and California's Unfair

Competition Law, Cal. Bus. & Prof. Code § 17200 class action related to short

message service (SMS) technology

Law Firm: KamberEdelson, LLC
Case Name: Abrams v. Facebook, Inc.

Services Provided: Testifying expert, expert reports for plaintiff

Disposition: Settled Date: 2007

Expert Engagement:

Type of Matter: Intellectual property (patents) related to short message service (SMS) technology

Law Firm: Paul Hastings LLP

Case Name: TeleCommunication Systems, Inc. v. Mobile 365, Inc.

Services Provided: Testifying expert, expert reports, depositions, trial testimony for defendant

Disposition: Settled Date: 2007



Wireless Research Services, LLC Rate Sheet January 1, 2016

Wireless Research Services, LLC 2016 Rate Sheet

ITEM	FEE
Non-refundable Retainer at Time of Engagement	\$4,000
Expert Witness Consulting, Expert Reports	\$475 per hour
Depositions, In-court Testimony	\$500 per hour
Required Travel, Lodging, Board and Administrative Expenses	\$1,000 per airline travel day plus actual incurred expenses
Invoicing	Payment due upon receipt
Penalty for Late Payments	10% of total invoice added after each 30 days late until full payment is received

By signing below and returning an executed copy to Wireless Research Services, LLC along with payment of the non-refundable retainer, you agree to the payment terms contained on this rate sheet.

Agreed to by:	
Law firm/Company:	
Case Name:	
Date:	

EXHIBIT B

CONFIDENTIAL - REDACTED

EXHIBIT C

CONFIDENTIAL - REDACTED

EXHIBIT D

CONFIDENTIAL - REDACTED

EXHIBIT E

CONFIDENTIAL - REDACTED

EXHIBIT F

CONFIDENTIAL - REDACTED

EXHIBIT G

CONFIDENTIAL - REDACTED

EXHIBIT H

CONFIDENTIAL - REDACTED